



Missisquoi Matters

is the quarterly newsletter of the Friends of Missisquoi National Wildlife Refuge, Inc., a non-profit 501(c)(3) organization, dedicated to promoting a better awareness, appreciation, conservation, and responsible utilization of the Missisquoi National Wildlife Refuge.

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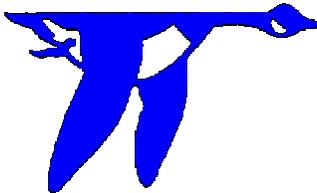
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Newsletter edited by Ken Copenhaver

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MNWR HQ hours are
Monday thru Friday
8:00am – 4:30pm
Saturdays
10:00 am – 2:00 pm

Manager's Update – Winter 2015

by Ken Sturm, Refuge Manager, Missisquoi NWR

Although winter can sometimes be a slower season at northern refuges, Missisquoi's staff has been quite busy over the last few months. Other than the normal refuge operations during the winter, there is always the need to plan for the upcoming year. Many spring and summer projects take considerable time during the winter months to organize. One such project is the Junior Duck Stamp program.

The Junior Duck Stamp program is an effort to bring conservation topics through art to schools across the nation. Missisquoi NWR manages the program for the entire state of Vermont. The concept is to encourage schools throughout the state to teach wetland habitat and waterfowl conservation to students in kindergarten through high school. Using scientific and wildlife observation principles, the program helps students communicate visually what they have learned by creating an entry for the Junior Duck Stamp Program art contest. The program comes with a full curriculum that educators can use to tailor their classroom learning experience towards conservation topics.

In the end students submit original artwork to the refuge where it is judged by a community committee. This year's judging will be held on March 25th. The winner of each state's contest is then sent to the national competition. Ultimately one piece of artwork is selected for the national Junior Duck Stamp, which is then printed and sold in post offices across the country. The funds generated from the sale of the Junior Duck Stamp go directly toward environmental education programs. You can see last year's Junior Duck Stamps at the refuge Visitor Center right now, so stop in to see the inspiring work of Vermont's young naturalists! To learn more about the Junior Duck Stamp program or how to get involved, please contact Dave Frisque, Park Ranger, at the refuge office or get more information here:

<http://www.fws.gov/juniorduck/JuniorDuckStamps.htm>

On the biological side, Judy has been busy coordinating and conducting our annual beaver and muskrat lodge surveys, which help the refuge track population trends in the various parts of the Missisquoi Delta. Thanks especially to Friends board member Paul Madden who has again volunteered to help with this survey! A variety of other tasks have kept our biologist busy including planning for this Year's field season, entering last year's data into regional databases, and reporting survey results to our partners. Judy will also continue working on a planning document called the Habitat Management Plan (HMP). This document is a "step-down" plan from the refuge's Comprehensive Conservation Plan finalized in 2007. The HMP is tailored to specific habitat management objectives and strategies for wildlife

and plant communities highlighted in the refuge's Comprehensive Conservation Plan. A large and fairly complex document, we expect the HMP to take some time to complete.

I am happy to report that the Friends have been awarded another grant from the state of Vermont for \$4,000.00 to support water chestnut control in refuge wetlands! Water chestnut is an aggressive invasive plant that can choke aquatic ecosystems, causing a negative impact on fish and wildlife habitat. The refuge will again be able to hire two contractors to work throughout the summer to remove this aquatic invasive species. I thank the Friends of Missisquoi NWR for continually supporting the refuge and for sponsoring this important grant.

Winter is also a great time for the refuge to sit back and think about larger issues—issues which are not necessarily governed within the “blue goose” signs that designate our boundary. Regional water quality is definitely one of these issues. From recent public meetings held by the state and the EPA, it is clear that water quality concerns continue to be in the forefront of regional environmental planning efforts. This is all too true for the Missisquoi River watershed. The refuge's location at the end of the river puts it at the receiving end of the entire Missisquoi River basin, an 855 square mile area.

While the refuge's vast wetland acres do help filter and improve water quality before storm and spring water flows enter Lake Champlain, water quality is still a great concern to me as a refuge manager. Continued degradation of water quality entering the refuge may also mean degraded habitat for the fish and wildlife this refuge was established to protect. The refuge stands everything to gain by working with partners where possible to facilitate water quality education and improvement. This has never been more important, highlighted by the recent designation of three state wildlife management areas and the Missisquoi Refuge as Ramsar Wetlands of International Importance and the Wild and Scenic River designation of the Upper Missisquoi and Trout Rivers.

Lastly, I encourage everyone reading this newsletter to find time in their busy lives to get out on one of the refuge's trails. Better yet, bring your kids or your friends' kids and introduce them to the secrets of wildlife during the cold of Vermont's winter. Signs of wildlife are there for you to find and enjoy, and it's especially gratifying to see the excitement in a young person's eyes when they spot fox tracks in the snow or a rough-legged hawk hunting the refuge grasslands!

FRIENDS OF MISSISQUOI NATIONAL WILDLIFE REFUGE

Bi-monthly Board Meeting

Wednesday, March 11, 2015 at 6:30 pm

At the Refuge Visitor Center

Members are always welcome to attend.

Come and see what the board is planning and contribute your ideas.

Next meeting: Wednesday, May 13, 2015 at 6:30 pm

Friends News Shorts

Water Chestnut Grant The Friends have again applied for and received a grant of \$4000 from the state of Vermont for water chestnut control. The money will be used to hire two contractors, as we did in 2014, to remove water chestnut from wetlands throughout the refuge.

School Busing Stipends The Friends will again be offering stipends of up to \$100 to schools to help offset the cost of busing to bring students to the refuge. The refuge staff offers a variety of nature-oriented programs for students, but many schools do not have funds available for transportation to the refuge. Last year the Friends provided \$600, enabling 6 groups of students to take advantage of refuge programs.

Website Donations The Membership page on the Friends website now has the option of joining or renewing memberships on line via Paypal. If preferred, a membership form can also be printed and mailed. Check it out at <http://friendsofmissisquoi.org/joinonline/>

Digital Newsletter Option Beginning with the Summer newsletter, plans are to give members the option of receiving a digital-only newsletter. Since we now have email addresses for most members, we plan to start distributing the newsletter via email either as a PDF attachment or as a link to the Friends website where a PDF version of the newsletter can be downloaded. The new membership renewal form will give members the option of receiving a digital-only version of the newsletter. Newsletters will continue to be mailed to all members who do NOT opt out of the paper copy.

March Agenda The next meeting of the Friends' Board of Directors is Wednesday, March 11th, at 6:30pm at the Refuge Visitor Center. The directors meet every other month to conduct the business of the Friends of Missisquoi NWR. Our March meeting will include planning for May's International Migratory Bird Day, the Art on the Refuge exhibit, and the status of this summer's water chestnut eradication efforts. All Friends members are welcome!

News Shorts from the U.S. Fish and Wildlife “Friends Newswire”

President Obama Requests \$1.6 Billion in Fiscal Year 2016 for U.S. Fish and Wildlife Service. The President's Fiscal Year 2016 discretionary budget request supports \$1.6 billion in programs for the U.S. Fish and Wildlife Service, an increase of \$135.7 million over the 2015 enacted level.

Obama Administration Moves to Protect Arctic National Wildlife Refuge; Recommends Largest Ever Wilderness Designation. President Obama's Administration moved to protect the Arctic National Wildlife Refuge in Alaska, widely considered one of the most spectacular and remote areas in the world. Of the Arctic NWR's 19.8 million acres, more than 7 million acres are currently managed as wilderness. The U.S. Fish and Wildlife Service has recommended 12.28 million acres—including the Coastal Plain—for designation as wilderness. Only Congress has the authority to designate Wilderness areas.

More Than 113,000 Acres Conserved in Fiscal Year 2014. The Refuge System established one new refuge—Wapato Lake National Wildlife Refuge in Oregon—in FY14 and added 113,403 acres, including 28,549 acres in fee title and 84,854 acres under easement or lease, at 78 national wildlife refuges and 26 wetland management districts, spanning 40 states. The total includes 74,435 acres conserved in the Prairie Pothole Region. As of September 30, 2014, the Refuge System includes 562 national wildlife refuges, 209 waterfowl production area counties (managed by 38 wetland management districts), and 50 coordination areas, spanning more than 150 million acres. Refuge System staff also manage an additional 418 million acres of submerged lands and waters in four marine national monuments.



Spring Activities Schedule at Missisquoi National Wildlife Refuge

29 Tabor Rd.
Swanton, VT 05488

All programs and tours are free, but registration is required where noted.

Abenaki Life in Vermont, by Dr. Fred Wiseman **various Fridays, 6:30 to 8:00 PM**

Join Dr. Fred Wiseman for a series of Friday evening programs featuring various cultural aspects of Abenaki life in Vermont. The presentations started in January and will continue on February 27, April 24, May 29, and June 26. All programs are free of charge and will be presented at the refuge Visitor Center.

Maquam Bog Walk **Saturday February 28, 8:00 to 11:00 AM**

Join volunteer Greg Simard for a walk into the **Maquam Bog**. Participants should meet at the parking lot on Tabor Road signed as "Refuge Trails Parking" located about one mile off of Rte 78 on Tabor Road.

The Maquam Bog is a unique woodland bog habitat that is not found anywhere else in Vermont and in few other places in New England. The winter offers an opportunity to walk over the difficult terrain with relative ease as compared to most other times of the year. The bog has historically served as a deer wintering area. Snowshoe hare, short eared owls, and Northern Harriers are known to inhabit the bog.

This walk will require some degree of physical exertion and endurance.

Call 802-868-4781 to register for this activity. The walk is dependent on weather conditions. By registering you will receive updates on the status of the walk.

Owl Prowl **Friday March 6, 6:00 to 9:00 PM**

Join refuge volunteer and Friends Board member Ken Copenhaver for an evening walk to watch and listen for some of our resident birds who operate during the night shift. A winter **Owl Prowl** will be offered to interested refuge visitors starting at the **Stephen Young Marsh Trail** area. We will meet at the parking lot for the trail located on Tabor Road about one mile off Rte 78. Look for roadside signage for "Refuge Trails Parking." Dress appropriately and bring a low intensity flashlight.

Call 802-868-4781 to register for this activity.

Vernal Pool Walk **Friday April 10, 6:00 to 8:00 PM**

Join Park Ranger, David Frisque for a look at the life and activity in a vernal pool early in the spring. Vernal pools are important breeding areas for some of the more reclusive and seldom-seen amphibians, such as wood frogs and salamanders. Because these temporary wetlands often dry up completely by late summer or early fall, egg laying and early development of juvenile salamanders and frogs must begin early in the spring.

The Vernal Pool Walk will be at the **Stephen Young Marsh Trail** area. Meet at the Parking Lot at the trailhead for the Stephen Young Marsh Trail, located on Tabor Road about one mile off Rte 78. Bring a small flashlight and waterproof footwear.

Call 802-868-4781 to register for this activity.

Woodcock Walk 1**Friday April 24, 6:30 to 8:30 PM**

Join refuge volunteer, Greg Simard on a **Woodcock Walk** at the **Stephen Young Marsh Trail** area. Participants will meet at the parking lot located on Tabor Road about one mile off Rte 78.

Woodcock have a unique courtship display that incorporates an aerial display and ground level calling display that takes place near sunset and into the early evening hours. Join Greg for an enjoyable early evening walk to witness this unique springtime activity.

Please call 802-868-4781 to register for this activity.

Green Up Day**Friday May 1, 9:00 AM to Noon**

The Missisquoi NWR will conduct **Refuge Green Up Day** on Friday May 1, 2015. Green Up Day will begin at 9 AM and conclude at about noon. All participants should meet at the Louie's Landing Parking Lot on Rte 78. The refuge will concentrate its efforts on river cleanup activities using refuge boats. The refuge will monitor river water levels and flows. Should floodplain water levels be excessively high or if flow rates in the river channel are too strong due to snow melt and spring rains, this event may be postponed or canceled.

Please call 802-868-4781 to register for this activity.

Woodcock Walk 2**Friday May 8, 7:30 to 9:00 PM**

Join Park Ranger, David Frisque for another **Woodcock Walk** in the Stephen Young Marsh area. Participants will meet at the parking lot on Tabor Road about one mile off Rte 78. Look for roadside signage "Refuge Trails Parking."

Please call 802-868-4781 to register for this activity.

International Migratory Bird Day & Open House**Saturday May 16, 7:30 AM to 2:00 PM**

Join us as we celebrate the 23rd anniversary of **International Migratory Bird Day**. Activities will begin at 7:30 AM with an orientation at the refuge Visitor Center. All birding participants will return to the Visitor Center by 11:30 AM to tally results and have lunch. The refuge will continue its efforts to document species on the refuge via the refuge trails and waterways using boats and, if there is interest, using canoes and kayaks as well. We will record all species and as many individuals within those species as we can and then tally the results over a light lunch. A speaker will follow the lunch at approximately 1:00 PM with a natural resource presentation on a topic relevant to the International Migratory Bird Day celebration. The theme for the 2015 IMBD Program is "Restore Habitat, Restore Birds."

The opening of the "Art on the Refuge" art exhibit will take place at 10:00 AM. The exhibit will continue through July 17. For information about entering artworks in the exhibit, see the Friends website at http://friendsofmissisquoi.org/event/artshow2015/?instance_id=140

(Please pass this information along to any artists you may know who may be interested in exhibiting.)

Please call 802-868-4781 to register for this activity. Boat trips may fill up fast, so register early. Even if not interested in a boat trip, please register anyway so that we have a count for lunch. Thank you!

Kids Fishing Clinic**Saturday June 6, 8:00 AM to 1:00 PM**

The annual Kids Fishing Clinic will take place along the Macs Bend Road from Louie's Landing Parking lot down to the Macs Bend boat launch site, a distance of about 1 mile. Fishing will occur along the banks of the Missisquoi River. Numerous educational and informational venues will be operating near the Macs Bend Building while the fishing is on-going. Topics include fly casting, fly tying, spincasting, watershed

models and demonstrations, a fish ID aquarium, lure making, and an aquatic invasive species display. Children are encouraged to participate in these activities at some time while they are fishing. A light lunch will be served and a limited number of random drawing prizes will be given away at the end of the event.

People are asked to register for this popular annual event at 802-868-4781

Monthly Nature/Photography Walks 1st Saturday of each month, 9:00 to 11:00 AM

Join Friends of Missisquoi NWR members Joe Belanger, Mark Batchelder, and Bob Chaperon for nature/photography walks on various refuge trails, held the first Saturday of each month. Registration is not required. **Come have fun with us!**

March 7: Jeep Trail. Meet at the Louie's Landing boat access area. We will drive in to the trail head at Mac's Bend.

April 4: Maquam/Black Creek Trail. Meet at the parking lot located on Rte 78 approx. 2 ½ miles west of Swanton.

May 2: Railroad Trail. Meet at the parking lot on Tabor Rd, about a mile past the refuge headquarters and across the road from the marsh.

Monthly Bird Monitoring Walks 3rd Saturday of each month, 8:00 to 10:00 AM

Friends of MNWR members Ken Copenhaver and Julie Filiberti will lead bird monitoring walks year-round on various refuge trails on the third Saturday of each month. The purpose of the walks is to gather long-term data on the presence of birds, their abundance, and changes in populations. Observations are entered into the Vermont eBird database where data is stored by the Cornell Lab of Ornithology and the National Audubon Society. These walks are appropriate for birders of all skill levels and provide a wonderful opportunity to learn about birds throughout the seasons. **After 57 months of walks we have recorded 135 species of birds.** Registration is not required. The schedule for the next three months is:

March 21: Railroad Trail. Meet at the parking lot on Tabor Rd, about a mile past the refuge headquarters and across the road from the marsh.

April 18: Maquam/Black Creek Trail. Meet at the parking lot located on Rte 78 approx. 2 ½ miles west of Swanton.

May 16: Stephen Young Marsh Trail. See International Migratory Bird Day info above.

To check for any schedule changes or additions, visit the Friends website at www.friendsofmissisquoi.org and click on "Calendar."

For more information about the refuge, visit www.fws.gov/refuge/missisquoi/

Also check out the Friends Facebook page at <https://www.facebook.com/friendsofmissisquoi> to learn more about the refuge and coming events.

You can also look at, comment on, and share your own photos.

You do not need to have a Facebook account to view the page.



Shorebirds: No Sure Thing

by Judy Sefchick Edwards, Wildlife Biologist, Missisquoi NWR

What's a sure-fire way to get Vermont birdwatchers excited? Showing them shorebirds, of course! After all, seeing shorebirds in Vermont is no sure thing. But in August, September, and October of 2014, we were lucky: the stars aligned, Lake Champlain water levels receded, and, as a result, shorebirds of all shapes and sizes stopped in droves to rest and feed on the mudflats at Missisquoi National Wildlife Refuge before resuming their migration south.



HUDSONIAN GODWIT

What makes a shore bird a shorebird? Although there are lots of birds that use the shores of lakes and oceans and the shorelines of wetlands and rivers, only some are actually considered shorebirds. They're *not* gulls, herons, terns, or ducks, but instead are the inconspicuous little birds you may or may not notice at the waters' edge, silently skipping on rocks, probing in mud, or gracefully flying in formation when disturbed.

I must warn you—watching shorebirds isn't for the faint of heart! Since they hang in habitats by water, usually *you* must go to *them*, which may involve walking distances, or maybe even getting in a kayak or small boat. The other thing is: they're not that easy to see! Being cryptically colored in browns and grays, most shorebirds blend in well with their surroundings. Often, looking for movement is the best way to spot them.

Although they differ in size and shape, most shorebirds have small to medium-sized (5- to 15-inch tall) bodies with comparatively thin, sometimes stilt-like legs for walking, wading, and running. An assortment of narrow, pointed bills of differing lengths and slopes (straight, upturned, or downturned), allows each species to have a unique feeding strategy when probing for delicious, creepy, crawly, insects, invertebrates, mollusks, or crustaceans, of the aquatic variety, to eat. Shorebirds also have relatively long, pointed wings that allow for strong, fast flight. Since they undertake some of the most treacherous long-distance migrations of any North American birds, these ultra-marathoners need all the help they can get!



AMERICAN AVOCET

For two-thirds of North American shorebirds, an annual trek of around 15,000 miles is just "business as usual" since their migratory journeys take them from nesting grounds in the Arctic, to wintering grounds in Central and South America, and back again. That's a lot of frequent flier miles! Who could imagine that birds so tiny (most weighing between 0.7 and 11 ounces) could travel so far, fly at altitudes of 10,000 feet, or reach cruising speeds of around 50 mph?

Shorebirds seen during 2014 fall migration

Black-bellied Plover
American Golden-Plover
Semipalmated Plover
Killdeer
American Avocet
Greater Yellowlegs
Lesser Yellowlegs
Solitary Sandpiper
Spotted Sandpiper
Hudsonian Godwit
Ruddy Turnstone
Semipalmated Sandpiper
Least Sandpiper
Sanderling
Pectoral Sandpiper
White-rumped Sandpiper
Dunlin
Stilt Sandpiper
Short-billed Dowitcher

Although a few species of shorebirds nest on the refuge, most are just passersby that don't stop in Vermont, unless, of course, conditions are right. If we have the habitat, they will come...and this year, we did and they did! With plenty of exposed shorelines along the Missisquoi River and Dead Creek, and mudflats in Missisquoi Bay so extensive that you could go for a walk in your waders, the refuge and surrounding waters of Lake Champlain hosted an all-out feeding frenzy for thousands of migrating shorebirds of nineteen different species! A migration jubilation that kept me wondering: Who was more delighted—the satiated shorebirds or the shorebird-loving spectators?

For more information about the shorebirds of Missisquoi in 2014, see the next edition of *Missisquoi Matters!*

Photos by Julie Filiberti

**FRIENDS OF MISSISQUOI
NATIONAL WILDLIFE REFUGE**
<http://friendsofmissisquoi.org/>



ART ON THE REFUGE 2015 Bird Walk!

Call to Artists!

Help the refuge create an indoor bird walk. Submit your 2D art/photography for an exhibit to celebrate International Migratory Bird Day and the birds of the refuge. \$15 hanging fee entitles artists to one year Friends of the Refuge membership. No commission on sales.

Exhibit May 16 through July 17, 2015
Open House Saturday May 16

For more information friendsofmissisquoi.org/artshow

The Friends' Store

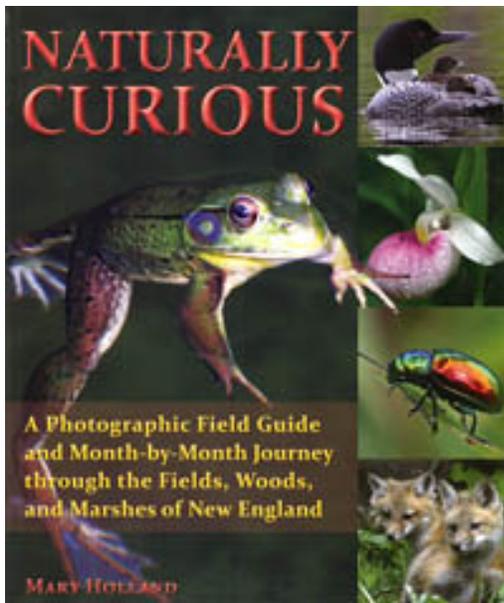
at the Missisquoi National Wildlife Refuge Visitor Center

BOOKS GAMES GIFTS TEE SHIRTS HATS

for people of all ages who love the outdoors

Naturally Curious

A Photographic Field Guide and Month-by-Month Journey through the Fields, Woods, and Marshes of New England



by Mary Holland

\$ 39.95, paper with flaps, 474 pages, 7 1/2 x 9 1/4, full-color photographs

"What a wonderful book! It's a guided tour of the noteworthy natural happenings of each month, tying together everything from maples to mayflies to moose."—David Sibley, author, *The Sibley Guide to Birds* and *The Sibley Guide to Trees*

Part handy field guide, part natural history book, this bountiful reference satisfies curiosities about the flora and fauna of New England. Hundreds of spectacular photographs provide a close look at regional animal and plant life, from tracks, dens, and nests to hunting, breeding, and hibernating. Organized by month to display a variety of wildlife throughout the seasons, this unique nature guide is full of maps, statistics, and quick

facts, and also includes in-depth discussions of some of the most interesting nature events New England has to offer.

About the author: Mary Holland is a naturalist, a nature photographer, the author of *Milkweed Visitors*, and natural history columnist who is a regular contributor to the *Valley News*, the daily newspaper of the Upper Valley of New Hampshire and Vermont. Her work in the field of environmental education has included employment with the Massachusetts Audubon Society and the Vermont Institute of Natural Science, where she directed the statewide Environmental Learning for the Future (ELF) elementary school program for several years. She lives in Hartland, Vermont.

When you visit the refuge, be sure to stop into the Visitor Center

and check out the store's selection nature-related books, gifts,

kid's games, and Missisquoi logo shirts and hats!